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10/806,271	03/22/2004	Oliver Hurst-Hiller	MSFT-2826/306403.01	1946

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)  
CIRA CENTRE, 12TH FLOOR  
2929 ARCH STREET  
PHILADELPHIA, PA 19104-2891

EXAMINER
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FERNANDEZ RIVAS, OMAR F

ART UNIT	PAPER NUMBER
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2129

MAIL DATE	DELIVERY MODE
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08/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/806,271	Applicant(s) HURST-HILLER ET AL.	
	Examiner Omar F. Fernández Rivas	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-17 and 25-29 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-8, 10-17 and 25-29 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/14/2004</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Office Action is in response to an RCE filed by the Applicant entered on May 29, 2007.
2. The Office Actions of December 1, 2006 and June 2, 2006 are incorporated into this Non-Final Office Action by reference.

### Status of Claims

3. Claims 1, 3-5, 10, 12-14, and 25 have been amended. Claims 9, 18-24 and 26 have been cancelled. Claims 1-8, 10-17 and 25-29 are pending on this application.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Biebesheimer et al. (US Patent Application Publication #2002/0152190, referred to as **Biebesheimer**).

#### **Claims 1, 10 and 25**

Biebesheimer anticipates a method for obtaining predicted user satisfaction data regarding the performance of a search mechanism which provides search results in response to user queries (**Biebesheimer**: abstract, L1-26; page 2, pars 16-20; page 3,

par 30; page 5, pars 42-44; Examiner's Note (EN): paragraph 8 applies. Obtaining a response set based on relevancy to the user's query is obtaining predicted user satisfaction data. Moreover, the indexing function determines the value of the search results (the response set) for a user in their context. Also note the weighting function (user satisfaction) of the Adaptive Indexing), comprising: storing at least one predictive pattern for predicting user satisfaction with said provided search results from data regarding user behavior in response to a query (**Biebesheimer**: abstract, L17-26; page 2, pars 16-19; page 3, par 32, L7-26; pages 5 and 6 pars 41-50; Fig. 1; EN: storing user interactions (predictive patterns) to select a response set that is most relevant to the user's query (predicting user satisfaction)) and applying said predictive pattern to context-based user behavior data comprising user feedback data and context data associated with the user feedback data, the context based user behavior data acquired after receipt by a user of previous search results (**Biebesheimer**: page 2, par 19; page 3, pars 30 and 32; page 4, pars 34-35; pages 4 and 5, pars 41-44; page 6, pars 49-50; EN: paragraph 9 applies. The indexing functions uses the user interaction records which include previous interactions of the user (predictive patterns) including context information (context-based user behavior data) and user feedback received from the user after a list of resources has been displayed. Moreover, the resource set is presented to the user based on the degree of fit with the user's most important context variables as indicated by the prior use of the system); and generating predicted user satisfaction data based on the application of the predictive pattern to the context-based user behavior data, the predicted user satisfaction data comprising an indication of

satisfaction that a user experiences in evaluating search results, wherein the predicted user satisfaction data is used to monitor the performance of a search mechanism (**Biebesheimer**: abstract, L1-12; page 1, par 2; page 2, pars 18-19; page 3, par 30; pages 4 and 5 pars 41-44; EN: paragraph 9 applies. The resource set is presented to the user based on the degree of fit (user satisfaction data) with the user's most important context variables as indicated by the prior use of the system as well as by context choices of the current query. The adaptive indexing functions will be optimized based on an evaluation metric applied to the user interaction feedback (monitoring the performance of the search mechanism)).

**Claims 2 and 11**

Biebesheimer anticipates storing at least one predictive pattern comprises utilizing data mining techniques to determine at least one predictive pattern for user satisfaction (**Biebesheimer**: page 5, par 43-44; EN: supervised learning is a data mining technique).

**Claims 3 and 12**

Biebesheimer anticipates said context-based user behavior data comprises explicit user feedback data (**Biebesheimer**: pages 4 and 5, par 41; page 6, pars 49-50; page 7, par 64, L1-12; page 8, pars 66-67; EN: obtaining data from the user defining the query is explicit user feedback as defined in page 2, par 17 of the present application).

**Claims 4 and 13**

Biebesheimer anticipates said context-based user behavior data comprises implicit user feedback data (**Biebesheimer**: page 2, par 19, L6-22; page 5, par 41, L7-

25; page 6, par 50; EN: user interactions is user behavior data; the selections made by the user are implicit feedback as defined in page 2, par 17 of the present application).

**Claims 5 and 14**

Biebesheimer anticipates said context-based user behavior data is selected from the group comprising: user navigation to a new page using a hyperlink; user navigation to a new page using a history list; user navigation to a new page using an address bar; user navigation to a new page using a favorites list; user scrolling behavior; user document printing behavior; user adding a document to said favorites list; user switching focus to a different application; user switching focus back from a different application; user closing a window; user dwell time behavior; user initiation of a new query; sequences of user behaviors; and user inactivity without switching focus from a window relating to said performed query (**Biebesheimer**: page 3, par 30; page 3, par 32; page 5, par 41, L7-17; EN: redefining a query is initiating a new query, user interactions is a sequence of user behavior).

**Claims 6 and 15**

Biebesheimer anticipates said application of said predictive pattern yields predicted user satisfaction data regarding said search mechanism (**Biebesheimer**: page 2, par 19; page 4, par 37; the Adaptive Indexing algorithm applies the predictive pattern. Maximizing the number of successful retrievals by improving the resource indexing functions is yielding predicted user satisfaction data regarding the search mechanism), and where said method further comprises: displaying said predicted user satisfaction data (**Biebesheimer**: page 6, par 49; page 9, par 73; EN: the ordered

response set is predicted user satisfaction data).

**Claims 7 and 16**

Biebesheimer anticipates said application of said predictive pattern further comprises isolating a set of said performed queries which are unsatisfactory and which share a common characteristic (**Biebesheimer**: page 3, par 30, L19-28; page 7, par 59-60; page 8, par 70; EN: the exclusionary filters isolate unsatisfactory search queries).

**Claims 8 and 17**

Biebesheimer anticipates said context-based user behavior data comprises a testing set of context-based user behavior data (**Biebesheimer**: page 3, par 33, L1-14; EN: paragraph 9 applies. The minimal user context vector is a testing set of context based user behavior).

**Claim 21**

Biebesheimer anticipates at least one of an operating system, a computer readable medium having stored thereon a plurality of computer-executable instructions, a co-processing device, a computing device, and a modulated data signal carrying computer executable instructions for performing the method of claim 18 (**Biebesheimer**: page 13, claim 20).

**Claim 27**

Biebesheimer anticipates isolating problematic queries based on the predicted user satisfaction data (**Biebesheimer**: page 2, par 19, L6-22; page 5, pars 43 and 44).

**Claim 28**

Biebesheimer anticipates generating a summary of measured satisfaction based on the predicted user satisfaction data (**Biebesheimer**: page 5, par 45, L9-23; EN: generating a response set based on the scoring or relevance (satisfaction data) to the user's query).

#### **Claim 29**

Biebesheimer anticipates monitoring a search mechanism responsive to the predicted user satisfaction data (**Biebesheimer**: page 2, par 19; page 4, par 37; page 5, pars 42-44; Fig. 1; EN: paragraph 9 applies. if the system is learning, then some monitoring is taking place).

#### **Response to Applicant's arguments**

5. The Applicants arguments have been fully considered but are not persuasive.

#### **In reference to Applicant's arguments:**

Claim 1 is amended to include the aspect of context-based user behavior comprising user feedback data and context data that is associated with the user feedback data. Also added is the aspect that context-based user behavior data is data acquired after receipt by a user of previous search results from a previous search.

Claim 1 is also amended to include that aspect that predicted user satisfaction data comprises an indication of satisfaction that a user experiences in evaluating search results and that the predicted user satisfaction data is used to monitor the performance of a search mechanism.

Thus, Applicant highlights that context-based user behavior data is data from the evaluation of previous search results and that the context-based user behavior data includes user feedback and context data that is associated with the feedback data. Also, Applicant highlights the aspect that predicted user satisfaction data are not search results. Predicted user satisfaction data is an indication of the satisfaction that a user experiences in evaluating search results, but the predicted user satisfaction data are not itself the search results. These aspects are taught throughout the as-filed specification



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and may also be found in the combined teachings of paragraphs 0044, 0053, 0054, and 0058 and supporting paragraphs.

Claims 3-5 are amended to comport with amended Claim 1. Claim 10 is amended to include some aspects of Claim 1. Claims 12-14 are amended to comport with amended Claim 10. Claim 25 is amended to include some aspects of Claim 1.

**Examiner's response:**

The arguments presented by the Applicant fail to establish how the prior art of reference fail to teach the limitations in the claims. The Examiner has cited the portions in the prior art that teach the limitations in the claims and provided an explanation on how he considers the prior art to disclose the limitations in the claims.

**Examination Considerations**

6. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 105455, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
7. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art

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and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

8. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

9. Examiner's Opinion: paragraphs 5-7 apply. The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hosken US Patent #6,438,579

Fries et al US Patent # 6,751,606

11. Claims 1-8, 10-17 and 25-29 are rejected.

***Correspondence Information***

12. Any inquires concerning this communication or earlier communications from the examiner should be directed to Omar F. Fernández Rivas, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-2589 or email [omar.fernandezrivas@uspto.gov](mailto:omar.fernandezrivas@uspto.gov).

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.


If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas  
Patent Examiner  
Artificial Intelligence Art Unit 2129  
United States Department of Commerce  
Patent & Trademark Office

Monday, July 30, 2007

*OF/R*

  
JOSEPH P HIRL  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100